1 INTRODUCTION

This introductory chapter provides an overview of the Final Environmental Impact Statement (EIS) as a whole. This chapter includes information on the EIS' purpose and the need for the proposed project under review. It also includes a brief overview of the history of Ames Research Center, and of the relationship between the proposed action and plans that have been adopted in the past.

A. Purpose of this Environmental Document

This Final Environmental Impact Statement (EIS) has been prepared to evaluate the environmental consequences of five alternatives for the proposed NASA Ames Development Plan (NADP) for Ames Research Center. Under the proposed alternatives, development would occur within four areas of Ames Research Center totaling approximately 600 hectares (1,500 acres). These four areas, listed below, comprise the Study Area for this EIS.

- NASA Research Park: an 86-hectare (213-acre) roughly triangular site located between the airfield, Highway 101, and the original Ames Research Center campus.
- Eastside/Airfield: a 385-hectare (952-acre) site comprised of the airfield and the lands to the east of it.
- Bay View: a 38-hectare (95-acre) site immediately north of the original Ames Research Center campus.
- Ames Campus: the original 95-hectare (234-acre) site of Ames Research Center.

This EIS has been prepared pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), and according to the Procedures for Implementation of NEPA for NASA (CFR Title 14 Part 1216 subpart 1216.3).

B. Lead Agency and Cooperating Agencies

The lead agency charged with implementing the preferred alternative and reviewing its environmental consequence is the National Aeronautics and Space Administration (NASA).

In compliance with NEPA, NASA has collaborated with several other federal and local agencies during the planning and review process, all of whom have been invited to serve as Cooperating Agencies. These cooperating agencies include:

- State Office of Historic Preservation
- Bay Area Air Quality Management District
- Federal Highway Administration
- City of Mountain View
- City of Sunnyvale
- Santa Clara Valley Transportation Authority
- Caltrans

C. Location and Component Parts of the Site of the Proposed Action

Ames Research Center is located on approximately 800 hectares (2,000 acres) of land between Highway 101 and the southwestern edge of the San Francisco Bay in the northern portion of Santa Clara County, California. The City of Mountain View borders it to the south and west, and the City of Sunnyvale to the south and east. Ames Research Center is about 56 kilometers (35 miles) south of San Francisco and 16 kilometers (10 miles) north of San Jose, in the heart of Silicon Valley. Figure 1-1 shows the regional context of the site, and Figure 1-2 shows the local context.

The Study Area consists of approximately 600 hectares (1,500 acres) of land, almost all of the land under NASA's control within Ames Research Center.

FIGURE 1-1

REGIONAL CONTEXT MAP

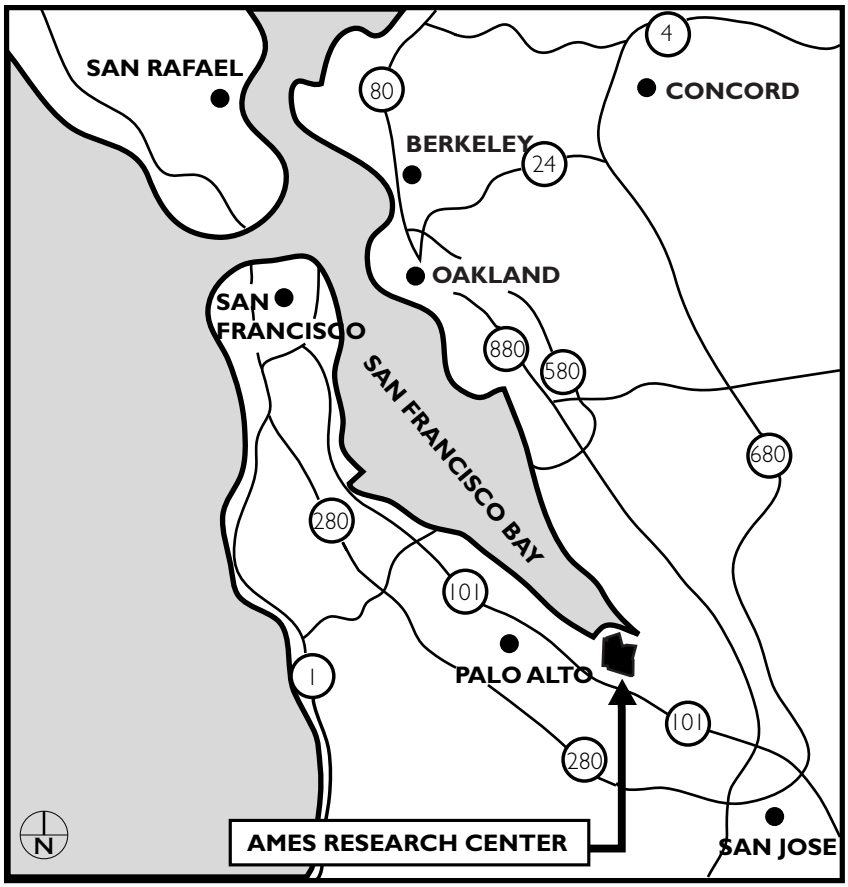
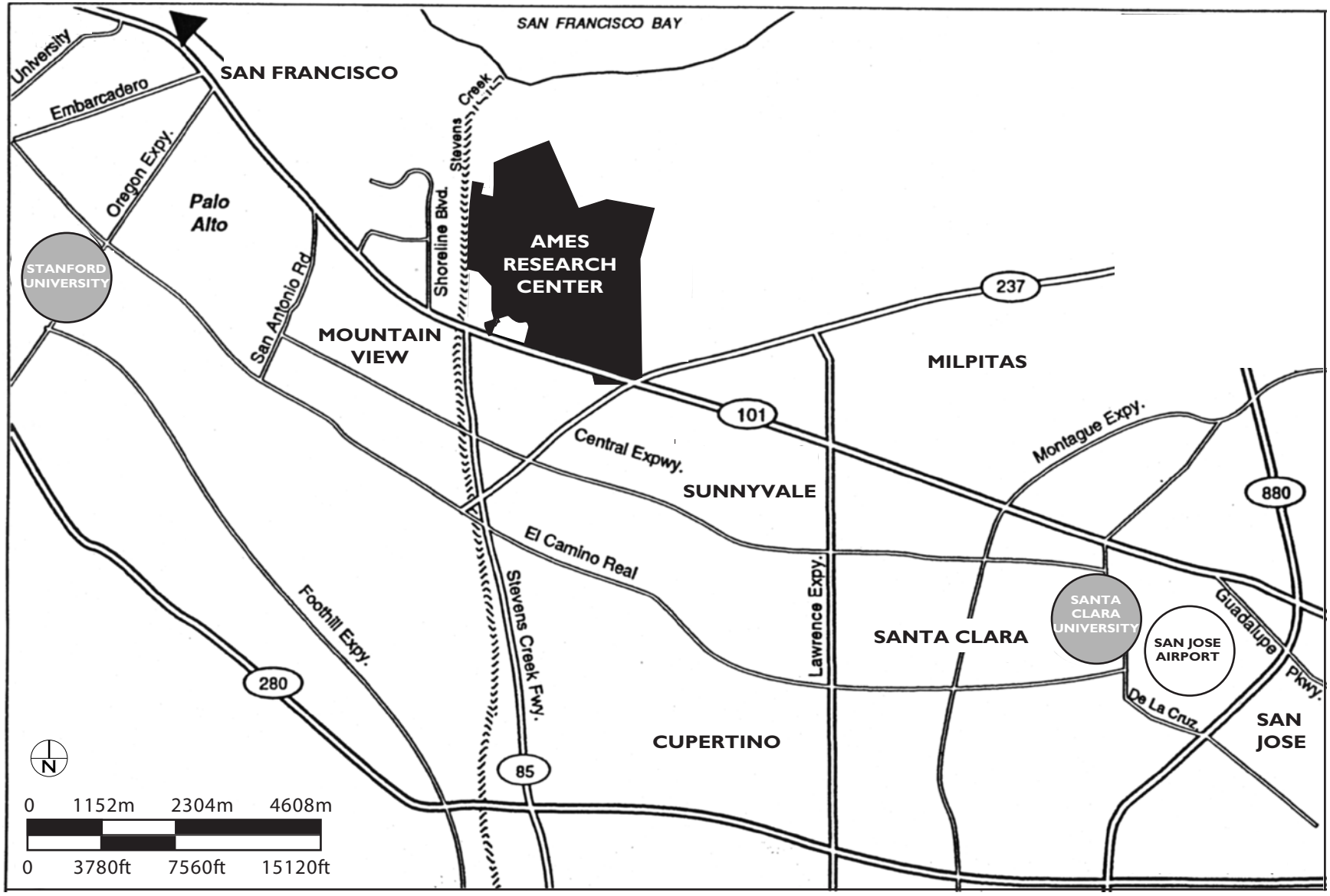


FIGURE 1-2

LOCAL CONTEXT MAP



As noted above, the Study Area is divided into four sub-areas, which are described below and mapped in Figures 1-3 to 1-7:

- **NASA Research Park:** an 86-hectare (213-acre), roughly triangular site located between the airfield, Highway 101, and the original Ames Research Center campus. This area includes most of the Shenandoah Plaza National Historic District, except for Berry Court and Hangars 2 and 3. Current uses in the NASA Research Park (NRP) area include office space, retail and business services, airfield operations, vehicle maintenance, research facilities and storage, some of which are used by the Army Reserve, Department of Defense Commissary and Exchange, Air Force and Air National Guard. The 140 existing buildings within the NRP area contain approximately 150,000 square meters (1.6 million square feet of space).
- **Eastside/Airfield:** a 385-hectare (952-acre) site comprised of the airfield and the lands to the east of it. Current uses include the golf course, Hangars Two and Three, and the airfield operations, fueling and munitions storage facilities of the California Air National Guard (CANG).
- **Bay View:** a 38-hectare (95-acre) site immediately north of the original Ames Research Center campus. This land is predominantly undeveloped upland grassland containing a few research facilities such as the Outdoor Aerodynamic Research Facility.
- **Ames Campus**: the original 94-hectare (234-acre) site of Ames Research Center. This area was referred to as the Existing ARC Facilities in the Notice of Intent filed in June 2000, and in scoping meetings held in July 2000. Current uses in the Ames Campus area include office, research and development, and storage. The existing buildings in the Ames Campus area contain approximately 268,000 square meters (2.89 million square feet) of space.

D. Brief History of Ames Research Center

Ames Research Center sits almost entirely on one of the last intact land grants in California. It was originally granted in 1844 to Ynigo, a Native American, by Micheltorena, the governor of the Mexican state of California. The rancho was called Posolmi or Pozita de las Animas: "Little Well of the Souls." The former rancho was chosen as the site for Moffett Field after a fierce competition between San Diego and the Bay Area to house the Navy's West Coast dirigible base. In one of the first cooperative regional economic development campaigns, Santa Clara, San Mateo, San Francisco and Alameda Counties set up a joint program to find a site for the new base, purchase it, and donate it to the Navy. The counties eventually purchased approximately 400 hectares (1,000 acres) of the Ynigo Rancho at a cost of almost $500,000 and offered it to the Navy for $1 to match the offer at Camp Kearney in San Diego. After a long battle in the press and in Congress, President Herbert Hoover signed the bill allowing the Navy to accept the site and appropriating $5 million for construction in 1930. The base officially opened in 1933.

Moffett Field was built to house the biggest aircraft of its day: the *USS Macon*, a 239-meter (785-foot) long dirigible that arrived at Moffett Field for the first time in 1933. To house it, the Navy built the massive Hangar 1, one of the best-known landmarks in the Bay Area. The *Macon* was intended to provide long-range reconnaissance for the Pacific Fleet, but it flew only eight missions before it crashed off the coast of Monterey in 1935.

With the *Macon* gone, the US Navy no longer had a demonstrable use for Moffett Field. It was transferred to US Army command and became a base for the Army Air Corps, the predecessor to the US Air Force. After the attack on Pearl Harbor, the military decided it needed aircraft to patrol the Pacific for submarines and mines, and the Navy responded by restarting the lighter-than-air project with smaller blimps only 75 meters (246 feet) in length.

Even Hangar 1 was insufficient to house all the activity around the revitalized lighter-than-air reconnaissance project. In 1942, two more huge hangars were

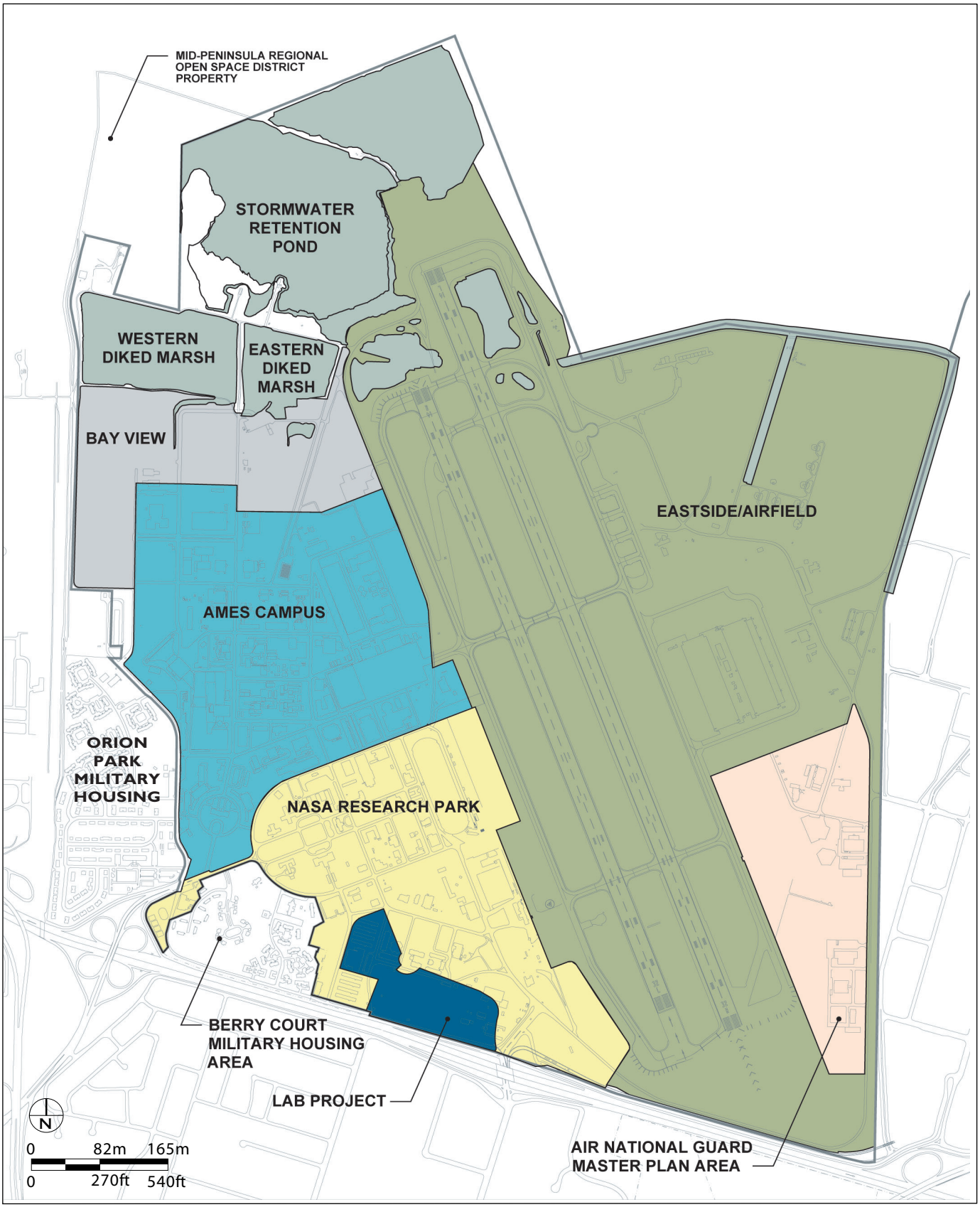


FIGURE 1-3

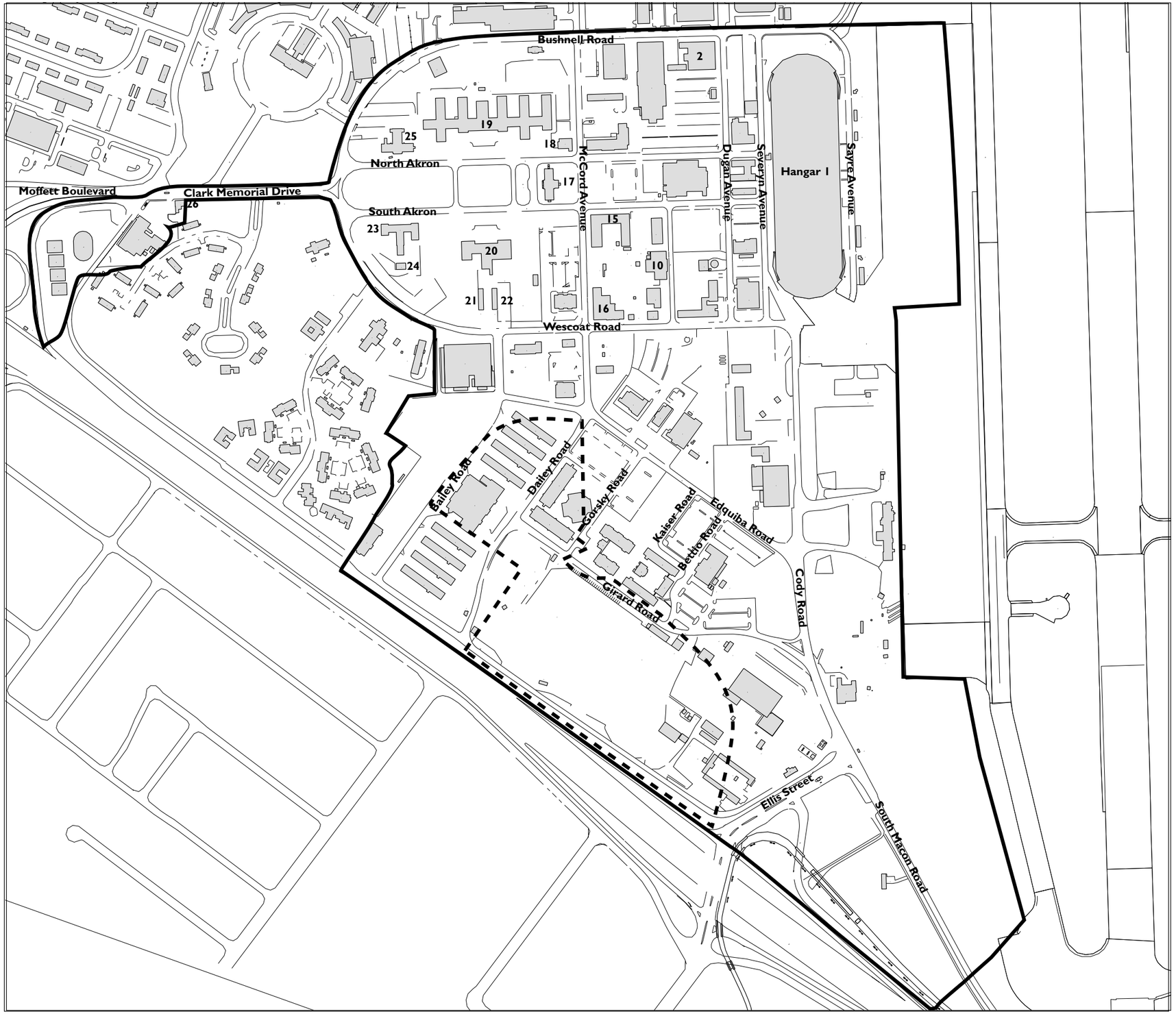
DEVELOPMENT AREAS

NASA AMES RESEARCH CENTER

NASA AMES DEVELOPMENT PLAN FINAL EIS

FIGURE 1-4

NASA RESEARCH PARK



Development Area Boundary

Lab Project Area

0 27m 53m 119m

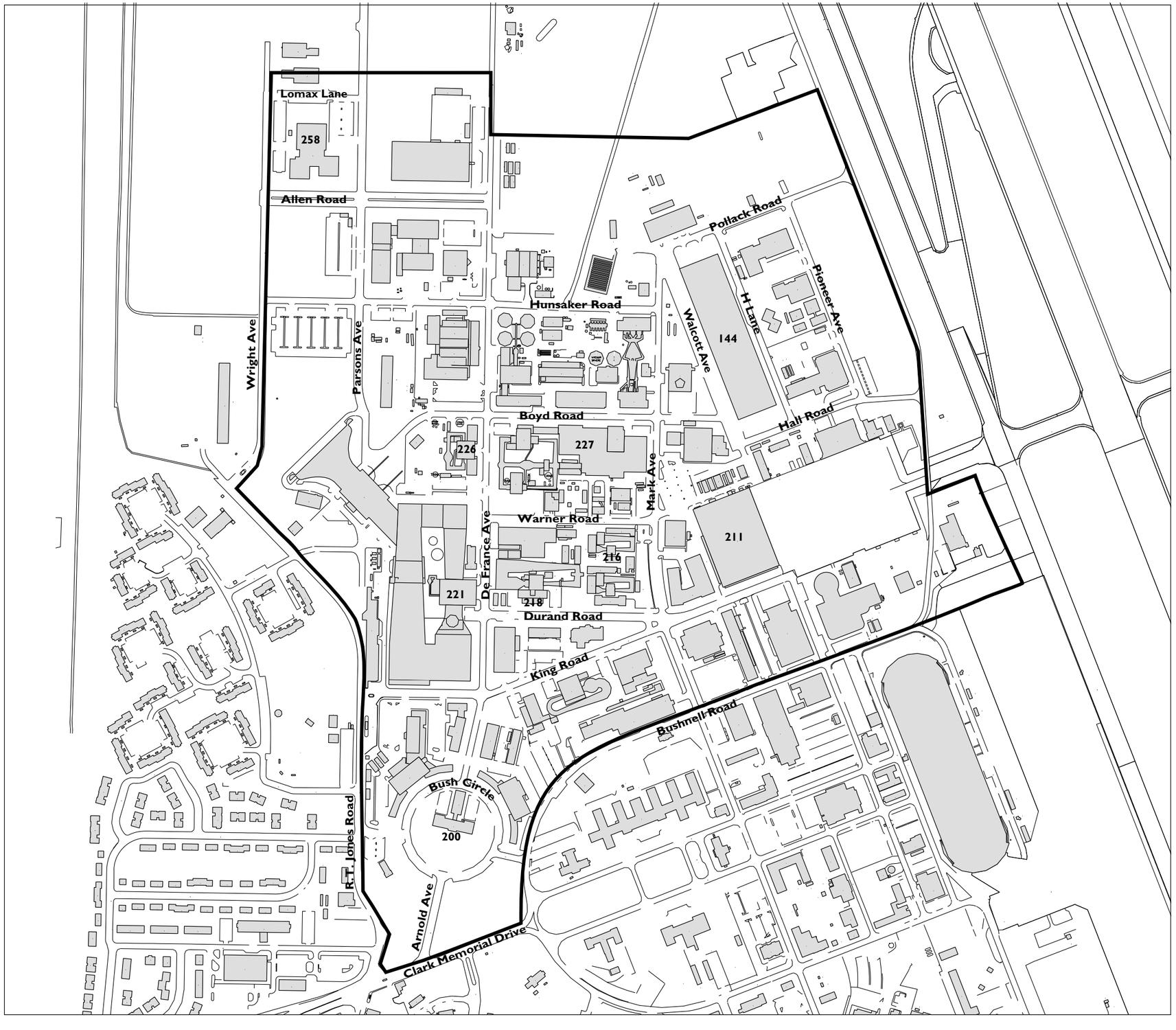
0 88ft 175ft 350ft

NASA AMES RESEARCH CENTER

NASA AMES DEVELOPMENT PLAN FINAL EIS

FIGURE 1-5

AMES CAMPUS



Development Area Boundary

N

0 28m 59m 119m

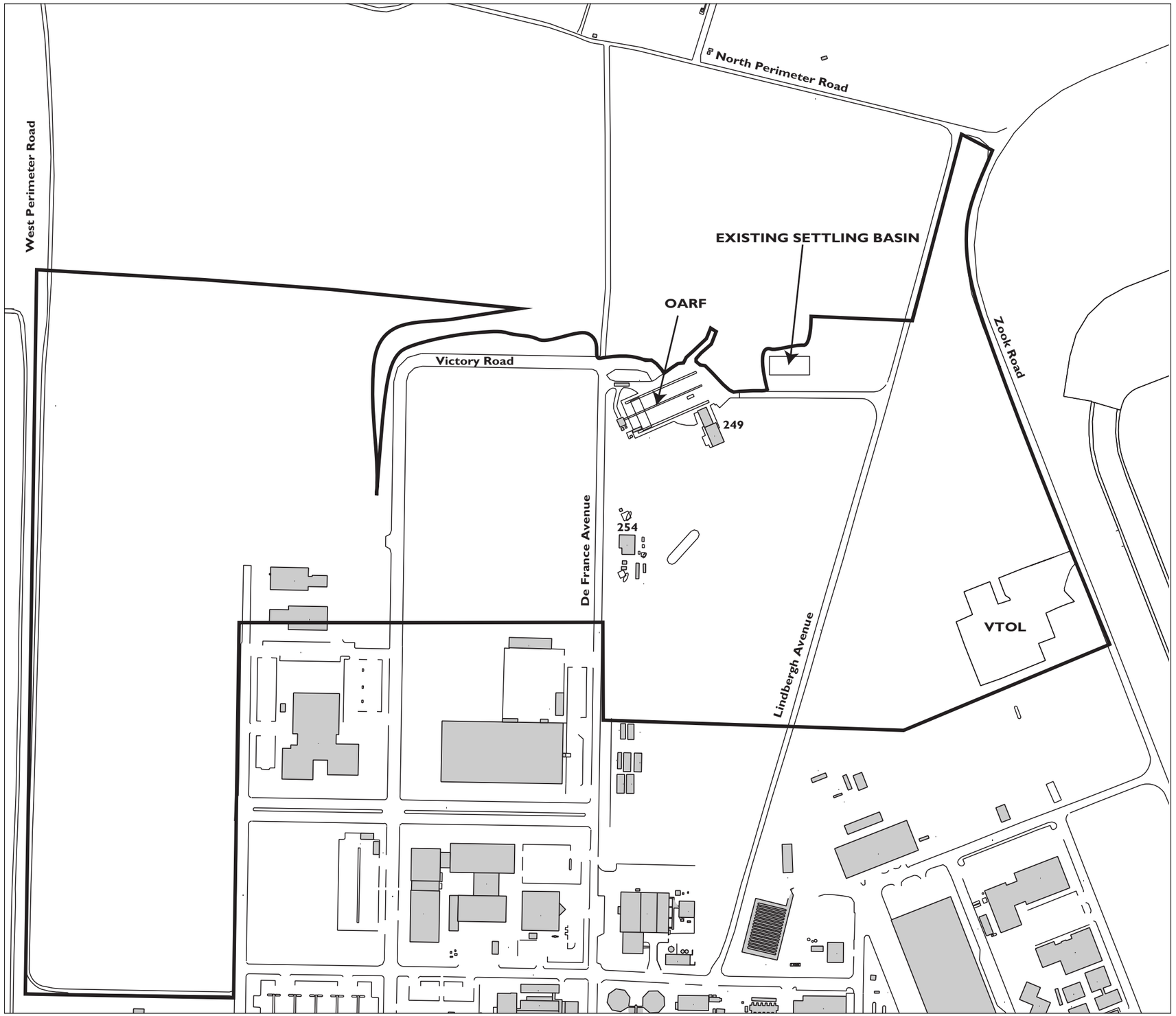
0 98ft 195ft 390ft

NASA AMES RESEARCH CENTER

NASA AMES DEVELOPMENT PLAN FINAL EIS

FIGURE 1-6

BAY VIEW



Development Area Boundary

N

0 19m 40m 79m

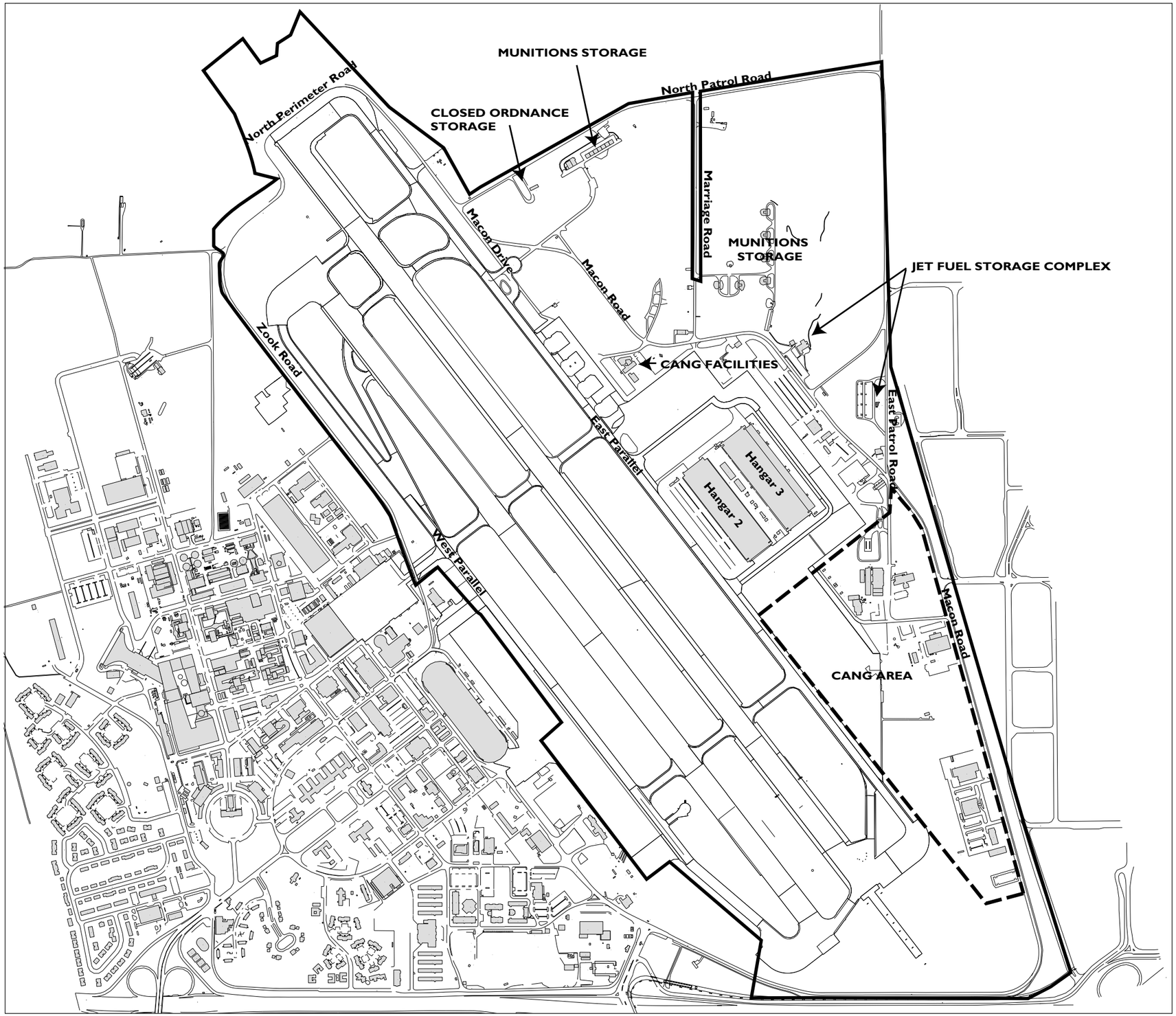
0 65ft 130ft 260ft

NASA AMES RESEARCH CENTER

NASA AMES DEVELOPMENT PLAN FINAL EIS

FIGURE 1-7

EASTSIDE/AIRFIELD



Development Area Boundary

CANG Area

0 500' 1000' 2000'

constructed in record time, primarily out of wood and concrete because of war-time shortages of steel. As many as 20 blimps at a time were on duty at the base during the war years, and Moffett Field had an excellent record of ship and mine detection. But as jet airplanes were developed and began to take over the functions of the blimps, the lighter-than-air program went into decline. In 1947, the last blimp at Moffett Field was deflated. The era of lighter-than-air ships was over.

In the post-War era, Moffett Field became a jet airplane base. At first it was home to air transport and repair squadrons. When the Korean War began, however, Moffett Field became the home base for jet fighters serving on aircraft carriers in the Pacific. In the 1960's, Moffett Field returned to its original mission of long-range reconnaissance and anti-submarine patrols with the arrival of the Navy's newest anti-submarine aircraft: the P-3 "Orion." By 1973, aircraft based at Moffett Field were responsible for patrolling approximately 241 million square kilometers (93 million square miles) of the Pacific Ocean, an area stretching from the coast of Alaska to Hawaii.

During the same post-war period, Moffett Field became a major center for the development and testing of new aviation and flight-related technology. Congress originally established Ames Research Center in 1939 as the Ames Aeronautical Laboratory under the National Advisory Committee for Aeronautics (NASA's predecessor). In 1958, Congress created NASA with the National Aeronautics and Space Act of 1958, (42 U.S.C. § 2451 et seq.). The Ames Aeronautical Laboratory was renamed Ames Research Center and became a NASA field center. Over the years, Ames Research Center used its laboratories and wind tunnels to test dozens of propulsion systems and airplane designs. As the coalition of Bay Areas counties predicted when it lobbied for the creation of Moffett Field in the late 1920's, the base's research program and facilities catalyzed the development of numerous private technology and aerospace corporations, among them Hiller Aircraft Corporation and Lockheed Martin.

In 1991, as part of cost-cutting measures by the US Secretary of Defense, the Federal Base Closure and Realignment Commission decided to decommission Moffett Field. NASA decided to take over the operation of Moffett Field because the airfield had become essential for Ames' aerospace and aeronautic research. In 1994, NASA took control of Moffett Field, and began planning how to use the newly acquired land to support its research mission.

Today, aerodynamic testing and other research occurs in an area referred to as the Ames Campus, which now includes more than 50 buildings on 95 hectares (234 acres). The Ames Campus area's wind tunnels and immediate proximity to a federal airstrip have made it an invaluable facility for testing the largest new airplane prototypes. In addition to aerospace engineering, ARC is NASA's lead center for research in astrobiology, a multi-disciplinary field which studies the origin and distribution of life in the universe, the effects of gravity on living organisms, and the Earth's atmosphere and ecosystems. The third focus of research at ARC is information science and technology. ARC is NASA's lead center for information technology with the responsibility to strategically maintain and increase NASA's preeminent position in this field. Ames Research Center has full management responsibility for key programs such as Intelligent Systems, High-Performance Computing and Communication, Design for Safety, and Nanotechnology. ARC is recognized worldwide for its historic and on-going work developing innovative, intelligent, high performance information technologies to enable space and aeronautics missions.

E. The Existing Comprehensive Use Plan and Subsequent Planning Efforts

When NASA took control of Moffett Field, it developed a Comprehensive Use Plan (CUP) for the base. The CUP has served as the guiding document for development at Ames Research Center since its preparation, environmental review, and approval in 1994. The NADP, once adopted, will replace the CUP as the operative planning document for Ames Research Center.

The CUP foresaw a program of demolition and new construction, with a total of just over 93,000 square meters (1 million square feet) of new building space across the entire base constructed over a period of 15 years. Under the CUP, the airfield was to remain restricted to government use, although operations were allowed to increase to up to 80,000 flights per year. Administrative and operational support services were to increase slightly. The largest change on the base was foreseen to be in research and development activity, with just over 79,000 square meters (800,000 square feet) of new R&D space for laboratories, wind tunnels and other related facilities. NASA is proposing to construct an advanced space research lab and related office and R&D space, as well as temporary museum facilities, under the CUP. This is described in more detail in Chapter 2 of this EIS.

In 1996, NASA considered allowing the Air Force to host commercial air cargo members of the Department of Defense's (DOD) Civil Reserve Air Fleet (CRAF) at Moffett Field to augment DOD military airlift needs with civil air carrier resources. NASA prepared a draft Environmental Assessment (EA) and conducted public meetings to gather input on the CRAF proposal. In response to public opposition, NASA decided not to implement CRAF operations at Moffett Field.

Later that year, the cities of Mountain View and Sunnyvale appointed a 19-member Citizens Advisory Committee (CAC) to study and provide input to NASA about the future uses of Moffett that would best meet NASA's mission requirements and be supported by the communities. The Director of Ames Research Center, Dr. Henry McDonald, led the development of NASA's six point initiative, which outlined program goals and reuse concepts for the development of the former Navy base. After extensive public outreach and numerous public meetings, the Final Report, issued in 1997, of the Community Advisory Committee endorsed NASA's six point initiative.

Based on the six point initiative, NASA decided to build on the full range of its existing high-tech and aviation resources at Ames Research Center to develop partnerships with government agencies, local universities, private industry and

non-profit organizations to create a collaborative research and development environment. With these partner organizations, NASA proposes to develop a world-class, shared-use education and R&D campus. This is the subject of the project reviewed in this EIS.

F. Project Purpose and Need

NASA's mission includes undertaking aeronautical and space activities for the nation's welfare and security, expanding knowledge of the Earth and of phenomena in the atmosphere and space, using the engineering and research resources of the United States effectively and developing ground propulsion, advanced aviation propulsion and bioengineering research, development and demonstration projects. Ames Research Center pursues this mission as NASA's lead center for information sciences with the responsibility to strategically maintain and increase NASA's position in this field. Ames Research Center has full management responsibility for key programs such as Intelligent Systems, High-Performance Computing and Communication, Engineering for Complex Systems and Nanotechnology.

Ames is additionally responsible for building human expertise and physical infrastructure in direct support of Agency missions in astrobiology and aerospace operations. NASA Ames fulfills this mission through the development and operation of unique national facilities. Ames also fulfills its mission through the conduct and management of diverse leading-edge research and technology programs from the fundamental biology program to the thermal protection system research and the aviation system capacity program.

Proposed development under the NASA Ames Development Plan has the purpose of furthering NASA's mission by providing the vital scientific, engineering, and academic community necessary to create crucial research focused on the advancement of human knowledge about space, the Earth, and society. The NADP would extend and deepen the research and development capabilities of NASA Ames Research Center through R&D partnerships in key

research areas. Major areas of research would include astrobiology, life and space sciences, nanotechnology, information technology, and aerospace engineering. The new campus would also enhance the regional economy by expanding the opportunities available to the local aerospace and high-tech industries and educators. The project would create a needed vibrant research and education infrastructure that leverages existing budgets and other resources. The development plan is needed to advance NASA's research leadership, facilitate science and technology education, and create a unique community of researchers, students and educators. This unique community is needed to address the research problems of tomorrow: not from NASA alone, not from industry alone and not from universities alone will tomorrow's innovations emerge. They will come from the integration of these different segments, each making the most of their unique attributes-NASA's focus on high-risk, long-term research; industry's ability to react quickly with applied technologies; and the universities' expertise in educating and providing a vibrant workforce for the future.

A secondary purpose of the project is to enhance ARC's research capabilities and enable more efficient use of its land. The demolition of older buildings, reuse of existing buildings, and construction of new facilities involved in the creation of the new campus would make the best use of land at Ames Research Center while minimizing impacts on surrounding areas. New development will incorporate principles of energy efficiency, water conservation, transportation demand management, and seismic safety.

By integrating public and private research and development efforts, Ames Research Center would serve as a hub of technology transfer. Collaboration with NASA's development partners would keep ARC's researchers involved in cutting-edge technology advances in Silicon Valley, the San Francisco Bay Area and beyond, and promote commercial applications of the basic scientific research done at Ames Research Center.

All three of the components noted above---provision of a larger on-site scientific, engineering and academic community; enhanced research capabilities

and more efficient land use; and collaboration with private partners---are needed to allow NASA to remain on the forefront of technological advances being made throughout the Bay Area, and particularly in Silicon Valley. When NASA was first formed in 1958, it and other government entities took the lead in the development of many technologies, including computing and bio-engineering. Today, many universities and private corporations are leaders in these technologies. NASA must expand its research capacities and build new bridges to academic institutions and corporations if it is to remain a leader in technology and make innovations developed by others available for space and aeronautical research.

By establishing the NASA Research Park, Ames will leverage NASA resources for greater mission benefit, enhance scientific research, technology advancement and transfer of knowledge, improve NASA's education and outreach programs, provide workforce development for high-tech careers and increase public involvement in science, technology and exploration.

G. Organization of this EIS

This EIS is organized into nine chapters, a summary, appendices, and an index as described below.

- The **executive summary** describes the alternatives, and provides an overview of key environmental impacts and the measures proposed to mitigate them.
- **Chapter 1** is this introduction.
- **Chapter 2** describes the five alternatives for the redevelopment of the Study Area.
- **Chapter 3** describes the area affected by the NADP and the baseline for assessing the impacts associated with each alternative. This chapter covers public policy, land use, traffic and circulation, air quality, infrastructure and drainage, hazardous materials, geology, biological resources, visual

impacts, noise, cultural resources, recreation, and socio-economic conditions.

— **Chapter 4** describes the environmental impacts associated with each of the five alternatives, and describes mitigation measures that would reduce or prevent those impacts. In particular, it includes information on the project's air quality conformity determination, Section 106 historic resources consultation and Section 7 endangered species consultation, as well as information on impacts in all other areas of concern.

— **Chapter 5** describes and contains the analysis for the Mitigated Alternative 5, which was conceived in response to comments on the Draft Programmatic EIS. Mitigated Alternative 5 takes the place of the Alternative 5 presented in the Draft Programmatic EIS as the Preferred Alternative.

— **Chapter 6** summarizes NEPA-required information on local short-term uses of environment versus long-term productivity, irreversible and irretrievable commitments of resources, growth-inducement, cumulative effects and the project's compliance with federal executive orders and laws.

— **Chapter 7** contains a list of the preparers of this EIS, and of the agencies and organizations who received copies of the document to review.

— **Chapter 8** is the bibliography which lists all documents cited in this EIS.

— **Chapter 9** is a glossary of key terms and **Chapter 10** is the index.

— **Chapter 11** is an introduction to Volume III, which was assembled after the public review period on the Draft Programmatic EIS.

— **Chapter 12** contains the list of agencies, organizations, and individuals who commented on the Draft Programmatic EIS.

— **Chapter 13** contains reproductions of all comment letters received during the public review period, transcripts of public hearings, and responses to all comments.

— The **appendices**, which are incorporated by reference and published separately, contain background material prepared as part of the environmental analysis of the five alternatives.

H. Systems of Measurement

NASA policy dictates that all measurements should be written in the metric system. Most of the numbers in this document were originally computed using the English system of measurement, so they have been converted into the metric system and rounded to the nearest significant digit. Throughout the text of this EIS, the original English measurement follows the metric number in parentheses. For example, the size of a particular buildings would be listed as 9,000 square meters (100,000 square feet).

I. Review, Implementation and Permitting of the Proposed Action

1. Review Process

The Draft EIS was subject to a 50-day review and comment period during which the public, responsible agencies, and other interested jurisdictions, agencies, and organizations submitted comments on the document and the NADP. Under NEPA, the review period is only required to be 45 days long, but NASA allowed for a 50-day review period due to the importance of the project. This review period extended from December 10, 2001 to January 28, 2002.

During the review period, there were public meetings at Ames Research Center and in Sunnyvale and Mountain View to receive feedback on the Draft EIS. Comments were submitted at these public meetings and in writing. Written comments were submitted to Ms. Sandy Olliges, NASA Ames Research Center, Environmental Services Office, Mail Stop 218-1, Moffett Field, CA 94035-1000. Electronic mail was sent to researchpark@arc.nasa.gov.

After the close of the review period, NASA and its consultants prepared written responses to all substantive comments within the scope of the project received during the review period on the Draft EIS. Responses to the comments are presented in Chapter 12 of this Final EIS Changes to the Draft EIS have been incorporated into this Final EIS. A Notice of Availability (NOA) of this Final EIS was published in the Federal Register.

The Final EIS will be reviewed by NASA and, if it is judged to be comprehensive, a Record of Decision (ROD) approving the EIS will be signed by NASA 30 days after the Final Programmatic EIS is published . A Mitigation Implementation and Monitoring Plan (MIMP), which details all the mitigation measures and assigns responsibility for their implementation, will be prepared concurrently with the ROD. The ROD, when signed, will adopt a specific alternative of the NADP, and will commit NASA to the mitigations described in the EIS, which will be implemented and monitored in accordance with the MIMP.

A copy of the Final EIS was mailed to all commentors who requested a copy and to federal, state and local agencies who have special expertise and/or jurisdiction by law.

2. Project Implementation

After the ROD is signed, NASA will begin implementation of the NADP. Project implementation will include execution of agreements and leases with project partners and construction of the new facilities described in this EIS.

Given constraints imposed by the Clean Air Act (42 U.S.C. Sections 7401 *et seq.*), NASA will be limited to construction and operations (including mobile sources such as traffic) that generate no more than 91,000 kilograms (100 tons) of ozone precursors per year. This will limit the amount of new construction that can occur in any given year. The exact timing of the construction of individual facilities will be determined by NASA in consultation with its partners as the project progresses.

All projects to be constructed under the NADP will be evaluated by NASA for compliance with NEPA to determine if the proposed project's scope and impacts were adequately described in this Programmatic EIS. In addition, State partners will conduct their own CEQA reviews.

Future projects implemented pursuant to the NADP will be evaluated for NEPA compliance by the NASA Ames Environmental Services Office, using a NEPA Environmental Checklist to determine if the project's environmental impacts were adequately described in the NADP EIS. If the project is adequately covered by the NADP EIS, this will be documented in a Record of Environmental Consideration (REC), which will be signed by the Chief of the NASA Ames Environmental Services Office. Any applicable mitigation measures will also be identified in the REC. If the project is not adequately covered by the NADP EIS, then the REC will indicate the required level of additional NEPA review, either an EA or an EIS.

In addition to the NEPA review, NASA will review its partners' proposed projects for compliance with the NADP Design Guide; the TDM Program; the Historic Resources Protection Plan (HRPP); the Environmental Issues Management Plan (EIMP); federal, state and local environmental, health, and safety laws, regulations, and ordinances; Executive Orders; NASA Ames policies; and other applicable codes and standards. This additional review will be conducted by the NASA Ames Permit Review Board. Construction permits will be signed by the Chief Building Official at NASA Ames.

3. Required Federal Consultations

Beyond NEPA compliance, development under the NADP will require the following consultations to conform with federal law:

- *Determination of conformity with carbon monoxide (CO) emission requirements of the 1990 Clean Air Plan by the Bay Area Air Quality Management District.* Section 176(c) of the Clean Air Act Amendments requires Federal agencies to assure that their actions conform to applicable plans for achieving and maintaining the National Ambient Air Quality

Standards. The primary oversight responsibility for assuring conformity is assigned to the Federal agency. The proposed action is located in the Bay Area Air Quality Management District, which the Environmental Protection Agency has designated a nonattainment area for the ozone standard and a maintenance area for the national carbon monoxide standard. NASA has been in consultation with the BAAQMD regarding the conformity of the proposed action with the State Implementation Plan, and has made a determination of conformity. This is described in Sections 3.4 and 4.4 of this EIS.

— *Section 106 approval for preservation of cultural resources by the State Historic Preservation Office.* Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their actions on historic properties and seek comments on their actions from an independent reviewing agency, the State Historic Preservation Office (SHPO) and/or the Advisory Council on Historic Preservation (ACHP). Title 36 of the Code of Federal Regulations provides the methodology for assessing impacts on historic resources and details the requirements of the consultation process. For complex projects expected to continue over time, the regulations allow development of a Programmatic Agreement (PA) that governs ongoing and future activities undertaken as part of the project or program it addresses. An agency's obligations under Section 106 are satisfied once a PA is finalized and implemented. Pursuant to these regulations, NASA is preparing to enter into a PA with the ACHP and the SHPO to implement the NASA Ames Research Center HRPP and use its historic properties with clearly defined consultation requirements. The Draft PA is in the appendices of the HRPP, available under separate cover as Appendix G of this EIS. Historic resources and impacts to them are analyzed in Sections 3.13 and 4.13 of this EIS.

— *Consultation with the US Fish and Wildlife Service under the Endangered Species Act (16 U.S.C. Sections 1531 et seq.).* The Endangered Species Act of 1973 protects animal and plant species currently in danger of extinction (endangered) and those that may become endangered in the foreseeable future (threatened). The Act provides for the conservation of ecosystems

upon which threatened and endangered species of fish, wildlife, and plants depend, both through Federal action and by encouraging the establishment of state programs. Section 7 of this act requires Federal agencies to ensure that all federally associated activities within the United States do not harm the continued existence of threatened or endangered species or designated areas (critical habitats) important in conserving those species.

Agencies must consult with the United States Fish and Wildlife Service (USFWS), which maintains current lists of species designated as threatened or endangered, to determine the potential impacts a project may have on protected species. The USFWS has established a system of informal and formal consultation procedures. The USFWS preparation of a Biological Opinion concludes formal consultation.

Effects on vegetation and wildlife resources that would occur with the implementation of the NADP were analyzed under consultation with the USFWS. A Biological Assessment, which is available under separate cover as Appendix E, has also been conducted to determine project effects on fish and wildlife resources and has been submitted to the USFWS. More information on biological resources is contained in Sections 3.9 and 4.9 of this EIS.

— *Consistency with the San Francisco Bay Plan is required by the Federal Coastal Zone Management Act.* The Coastal Zone Management Act (CZMA) of 1972 addresses actions affecting coastal zones and requires that federal actions be consistent with state coastal zone management plans. Under the CZMA, federal actions must be consistent with local coastal zone management programs. In California, these programs generally include the California Coastal Act and Local Coastal Plans. In the case of the NASA Ames Research Center, the operative coastal zone management program is administered by the San Francisco Bay Conservation and Development Commission (BCDC) and generally consists of the McAteer-Petris Act, BCDC's *Bay Plan*, special area plans adopted by BCDC, and BCDC's regulations.

The BCDC's *San Francisco Bay Plan* contains the BCDC's enforceable policies and designates on Plan Maps the shoreline areas that are reserved for regional high-priority uses such as water-oriented recreation, seaports and airports. BCDC may issue permits for non-federal entities' proposed projects in priority use areas if the use is consistent with the designated priority use as well as the other provisions of the McAteer-Petris Act and the Bay Plan. BCDC would issue a consistency determination for federal agencies.

Bay Plan Map 7 designates Moffett Field as an airport priority use area and the Plan Map policy note regarding Moffett Field states "Moffett Naval Air Station - If and when not needed by the Navy, site should be evaluated for commercial airport by regional airport system study. (Moffett NAS not within BCDC permit jurisdiction.)" Although most of the area proposed for development under the NADP is outside BCDC permit jurisdiction, all of Moffett Field is subject to BCDC's coastal management program authority because Moffett Field is either in or directly affects the coastal zone.

NASA has prepared a consistency determination for the entire NADP project relative to the local coastal zone management program administered by BCDC, and submitted this determination to BCDC on April 12, 2002. At the request of BCDC, NASA submitted additional information on May 29, 2002 to support the consistency determination. This consistency determination concluded that the proposed NADP would be consistent to the maximum extent practicable with the *Bay Plan*, the McAteer-Petris Act and the Coastal Zone Management Act.